

REMARKS

This Amendment is responsive to the January 27, 2009 Office Action. In the Office Action, claims 18-27 and 29-31 stand rejected and claims 35 and 36 have been withdrawn. Claim 25 has been amended and claim 38 has been added. Support for the amendment to claim 25 may be found, for example, on page 6, lines 18-22 of the specification. Support for new claim 38 may be found, for example, in originally-filed claims 1 and 2. Claims 18-27, 29-31, 35, 36 and 38 are now pending.

Rejections Under 35 U.S.C. §102 and 35 U.S.C. §103

Claims 18-27 and 29-30 stand rejected under 35 U.S.C. § 102(b) for anticipation by U.S. Patent Application Publication No. 2001/0020409 to Hashimoto et al. Claims 29-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto in view of JP 07-132497 to Isamu. In view of the foregoing amendment and the following comments, reconsideration of these rejections is respectfully requested.

Independent claim 18 recites, *inter alia*, “wherein the cutting opening functions during the return stroke such that the side of the cutting plate remote from the sheet material engages around the cutting opening as a scraping edge on the slug adhering to the stamp and releases it from the stamp.”

In the *Response to Amendment* section of the Office Action at page 7, the Examiner continues to assert that the cutting edge portion (3a) of the die (3) in Hashimoto teaches a cutting plate having a scraping edge as in the claimed invention. In particular, the Examiner asserts “[t]he bottom edge of the cutting edge 3a of the cutting plate 3 blocks a chad or a small metal piece attached to the punch 2 during the return stroke of the punch.” Further, the Examiner contends “the cutting edge 3a can be considered as a scraping edge that scraps [sic.] the small metal piece formed when the punch hole is punched in the soft metal sheet and helps the small metal piece to drop out of the undercut portion 3b.” Contrary to the position asserted by the Examiner, however, Hashimoto fails to disclose, either expressly or inherently, that the cutting opening functions as a scraping edge on the slug adhering to the stamp and releases it from the stamp as recited in independent claim 18. As previously argued during the prosecution of this application, Hashimoto discloses that the diameter of

the undercut portion (3b) disposed under the lower portion of the cutting edge portion (3a) is slightly larger than the diameter of the bore to permit a chad "to freely drop out of the undercut portion 3b" (paragraph [0064]). Thus, the Examiner's assertion that the cutting edge 3a of Hashimoto can be considered as a scraping edge contradicts and is in conflict with the express teaching of Hashimoto that the chad or small piece of metal freely drops out of the undercut portion 3b. In other words, if the chad freely drops out of the undercut portion 3b, the cutting edge 3a does not function as a scraping edge and cannot be considered a scraping edge as recited in independent claim 18.

Further, the Office Action at page 7 states that "[t]he edge 3a of the cutting plate of Hashimoto similar to the edge 11 of the cutting plate of the instant invention removes or scraps [sic] slug or chad adhered to the stamp." The Office Action also asserts that "Applicant fails to elaborate how the edge 11 of the cutting plate in the instant application functions differently than the edge 3a of the cutting plate of Hashimoto" and "[i]f there is a chad or slug that is adhered to the stamp 2 of Hashimoto's punching machine naturally will be scraped or removed by the edge 3a as the stamp 3 moves upwardly and the chad or slug contacts the edge 3a." Applicants respectfully submit that the differences in the function between the claimed invention and the device of Hashimoto have previously been discussed during the prosecution of this application. In particular, the cutting opening of the claimed invention functions during the return stroke such that the side of the cutting plate remote from the sheet material engages around the cutting opening as a scraping edge on the slug adhering to the stamp and releases it from the stamp. As discussed above, the edge 3a of the die 3 of Hashimoto does not function as a scraping edge because the chad freely drops out of the undercut portion 3b. Thus, in contrast to the position asserted by the Examiner, the chad or slug adhered to the stamp 2 of Hashimoto will not naturally be scraped by the edge 3a, but rather will freely drop out. Further, the edge 3a of Hashimoto does not inherently disclose or suggest that the edge 3a functions as a scraping edge, because such an assertion directly conflicts with statements in Hashimoto that the chad freely drops out of the undercut portion 3b of the die 3.

Therefore, for at least the foregoing reasons, the Hashimoto reference fails to disclose all of the limitations of independent claim 18.

Independent claim 25 recites, *inter alia*, “wherein the cutting opening in the cutting plate has a scraping edge for releasing the slug adhering to the stamp, wherein the cutting plate is adapted to support a material layer for processing, and a side of the cutting plate remote from the side supporting the material layer is substantially non-parallel relative to the side of the cutting plate supporting the material layer such that only a part of a periphery of the slug adhering to the stamp is released by the scraping edge.”

For the reasons discussed above in connection with independent claim 18, Hashimoto fails to disclose or suggest a cutting opening in the cutting plate having a scraping edge for releasing the slug adhering to the stamp as recited in independent claim 25.

Moreover, Hashimoto fails to disclose or suggest where a side of the cutting plate remote from the side supporting the material layer is substantially non-parallel relative to the side of the cutting plate supporting the material layer such that only a part of a periphery of the slug adhering to the stamp is released by the scraping edge as recited in independent claim 25. In particular, as shown in Fig. 4, the edge of the cutting opening remote from the side supporting the material layer in Hashimoto is defined by the area where the cutting edge portion 3a and the undercut portion 3b are joined. Thus, the edge of the cutting opening 3a that is remote from the side supporting the material layer, as shown in Fig. 4, is parallel to the side supporting the material layer and fails to meet the limitations of claim 25.

Therefore, for at least the foregoing reasons, the Hashimoto reference fails to disclose all of the limitations of independent claim 25.

Further, claims 19-24, 26, 27 and 29-31 indirectly or directly depend from and add further limitations to either independent claim 18 or independent claim 25. Thus, claims 19-24, 26, 27 and 29-31 are deemed to be in condition for allowance for all of the reasons set forth hereinabove.

Reconsideration and withdrawal of these rejections are respectfully requested.

New Claim 38

Claim 38 has been added by the foregoing amendment. New claim 38 corresponds to the subject matter of previously presented claims 18 and 19.

Independent claim 38 recites, *inter alia*, “wherein the cutting opening functions during the return stroke such that the side of the cutting plate remote from the sheet material engages around the cutting opening as a scraping edge on the slug adhering to the stamp and releases it from the stamp, and wherein the stamp is carried through the cutting opening in the cutting plate during the punching operation such that the periphery of the slug adhering to the stamp is released over only a part of the periphery from the cutting plate.”

For the reasons discussed above in connection with independent claim 18, the cited references fail to disclose or suggest where the cutting opening functions as a scraping edge as recited in independent claim 18.

Further, the cited references fail to disclose or suggest where the stamp is carried through the cutting opening in the cutting plate during the punching operation such that the periphery of the slug adhering to the stamp is released over only a part of the periphery from the cutting plate. The Hashimoto reference discloses that a fragment of the workpiece sticking to the punch (2) may be removed by using an edge portion of the gate (13b) when the punch is moved up and down in the punching operation (see paragraph [0049]). The edge portions of the gate (13b) in Hashimoto, however, are perpendicular to the longitudinal axis of the punch (2) and fail to disclose where the periphery of the slug adhering to the stamp is released over only a part of the periphery from the cutting plate as in the claimed invention. Further, because the chad of Hashimoto freely drops out from the undercut portion 3b of the die 3, the die 3 of Hashimoto fails to disclose that the chad is released over only a part of the periphery from the cutting plate. Rather, due to the undercut portion 3b, it appears that the chad will be released over the entire periphery of the chad from the die. Therefore, new claim 38 is believed to be in condition for allowance.

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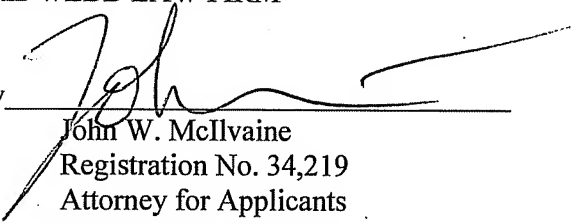
Conclusion

In view of the foregoing amendments and comments, Applicants respectfully request reconsideration of the rejections of claims 18-27 and 29-31 and allowance of pending claims 18-27, 29-31, 35, 36 and 38.

Respectfully submitted,

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